

### Abstract

The present invention relates generally to the modulation of arteriogenesis and/or the growth of collateral arteries or other arteries from preexisting arteriolar connections. In particular, the present invention provides a method for enhancing arteriogenesis and/or the growth of collateral arteries and/or other arteries from preexisting arteriolar connections comprising contacting an organ, tissue or cells with transforming growth factor beta 1 (TGF $\beta$ 1) or a nucleic acid molecule encoding TGF $\beta$ 1. The present invention also relates to the use of TGF $\beta$ 1 or a nucleic acid molecule encoding TGF $\beta$ 1 for the preparation of pharmaceutical compositions for enhancing arteriogenesis and/or collateral growth of collateral arteries and/or other arteries from preexisting arteriolar connections. Furthermore, the present invention relates to a method for the treatment of tumors comprising contacting an organ, tissue or cells with an agent which suppresses arteriogenesis and/or the growth of collateral arteries and/or other arteries from preexisting arteriolar connections through the inhibition of the biological activity of TGF $\beta$ 1. The present invention further involves the use of an agent which suppresses arteriogenesis and/or the growth of collateral arteries and/or other arteries from preexisting arteriolar connections through the inhibition of the biological activity of TGF $\beta$ 1 for the preparation of pharmaceutical compositions for the treatment of tumors.